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ABSTRACT

One in a series of reports by technical consulting groups, the document presents data and recommendations relevant to the task of developing plans for the future of Montana post-secondary education. An introductory outline of problems attending the projection of future needs in health care education in Montana is followed by a detailed review of data collected on basic education available or needed in 32 health care areas. The continuing education section points out that the rapid increase in technology and almost explosive development of new techniques and modalities make continuing education an absolute necessity, which is generally lacking in Montana. An eight-page summary gives specific and general educational recommendations and conclusions regarding the health education needs of the State. Six appendixes present supporting tabulated data. (NH)

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# MONTANA COMMISSION ON

TECHNICAL REPORT ON HEALTH CARE EDUCATION

# POST-SECONDARY EDUCATION

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TECHNICAL GROUP REPORT NO. 5

# HEALTH CARE EDUCATION

Prepared for

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May, 1974

This is one of a series of reports by technical consulting groups which are advisory to the Montana Commission on Post-Secondary Education. The data and recommendations presented in these reports reflect the work of the technical group and its members and not the views of the Commission itself.

The primary purpose of these reports is to provide the Commission with information relevant to its task of developing plans for the future of Montana post-secondary education. Each report will be reviewed by the members of the Commission and used in the Commission's deliberations.

The Commission is indebted to the many individuals from institutions of post-secondary education, state agencies and professional organizations who served on the technical consulting groups, and to the institutions and agencies which contributed the data and personal services which made it possible for the technical groups to carry out their charges.

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## HEALTH CARE EDUCATION

### Charge

1) To inventory all resources and facilities, including public and private, for health care education in Montana.

2) To assess the present and future need for education in the allied health field.

3) To make recommendations, or alternative recommendations, on how the state might meet health care education needs.

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# TECHNICAL REPORT ON HEALTH CARE EDUCATION

## INTRODUCTION

The projection of future needs in health care education is complicated by two factors:

1) Patterns of patient care are changing, responsibilities of the various professions and specialties in the allied health field are being altered, and in consequence, educational programs must also change. It is very possible that in the future there will be demands for types of allied health workers which do not even exist today.

2) Action by the federal government has had, and will doubtless continue to have, profound effects on health care and the related educational programs. These effects take two forms, one through federal requirements for licensing, certification, or participation in federal programs, and the other through massive shifts or withdrawals of funds in and out of various educational programs. No one has been able to predict when or where these changes will occur, and the only thing that can be predicted with certainty is that there will continue to be uncertainty as far as federal action is concerned.

A major fact which has emerged from this study is that an extremely important part of health care education for Montana students is carried on by professional schools and health care facilities outside of the state. If a single overriding problem can be identified, it is that of access to these programs by Montana students. It appears that in many cases the real bottleneck, both for the student who wishes to pursue a particular career and for the state which needs trained people in all health care areas, is obtaining admission to an out-of-state professional school or internship program. There is a rapidly accelerating trend for these institutions to place

smaller and smaller quotas on out-of-state students, and at the same time expect the sending state to pay an amount which corresponds more closely with the full cost of the education or training program. Montana must move to protect opportunities for health care education which are not available in the state, and this will probably take the form of "buying" (at the full educational cost) places in out-of-state professional schools and training programs. The alternative is that the opportunities for access to these programs will become increasingly difficult, and perhaps even cease, for Montana students.

## Methodology

The Group met first on December 17, 1973, at which time it developed a working list of health careers. For purposes of obtaining an inventory to fulfill item #1 of the charge, each member of the Group was given a project assignment to determine where existing programs (both public and private) are located in the state to educate individuals for these health careers. The programs identified are listed in Appendix A.

The list also contains out-of-state programs in which Montana students are enrolled through cooperative arrangements.

The last four meetings of the Group were devoted to discussion of each health care field and of the programs inventoried; determination of health care needs of the state in the future; and to the development of recommendations, if appropriate, for each area of health care education.

## BASIC ASSUMPTIONS

Basic Assumptions underlying the content and conclusions of this Technical Group are:

....That quality health care is a basic right of all Montanans

....That maldistribution of health care personnel, rather than shortages, is - generally speaking - the most serious deficiency in Montana's health care delivery system, especially as it relates to rural areas

....That future needs, especially for Montana's health care facilities, are in some cases difficult to project, since ever-changing federal regulations - such as those which relate to Medicaid/Medicare - require different levels of care, which almost always call for increasing numbers of and more highly trained health personnel on a resident or consulting basis

....That a national health insurance plan, which appears inevitable, may change the health care delivery system in the United States, and will doubtless require the training and employment of more and more health care personnel.

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## REVIEW OF DATA COLLECTED

## BASIC EDUCATION

### Medicine/Dentistry/Veterinary Medicine

The costs of establishing and operating professional schools of medicine, dentistry and veterinary medicine appear to be far beyond the fiscal abilities of a state of 700,000 persons.

(The cost of construction for a medical school, for example, has been estimated at approximately $1-2 million per student. The cost of maintaining a medical school has been estimated at an average cost of from $12,000-$13,000 per student per year, but estimates at some medical schools in the United States have gone as high as $26,000 per student per year.) For medicine alone, the Faulkner report of 10 years ago, showed that the four states of Montana, Wyoming, Idaho and Nevada possibly could support one medical school between them. The problem of a school supported by taxes of four states being located in any one state makes this a political improbability.

### The WICHE Program*

Therefore, in view of the above, other methods of financing such types of professional schooling must be found and have been found in the WICHE Student Exchange Program. While this program has not totally solved the problem of availability for entrance into schools of medicine, dentistry, veterinary medicine, dental hygiene, physical therapy, occupational therapy, optometry and podiatry, it has done more than any

*The Western Interstate Commission for Higher Education (WICHE) Student Exchange Program is an arrangement by which a student from a state without a school in the professional field of the student's choice is certified by WICHE and is subsidized by his home state for each year of education at such a professional school in one of the 13 WICHE states. (For amounts of subsidization for each professional area, see Appendix B.) The student must meet residency requirements for WICHE certification and preference is given to students who have accomplished their pre-professional training in Montana. WICHE does not give the student assistance in applying for or gaining admittance to the professional school of his choice - this he must do on his own.

other program to date. The effectiveness of the WICHE program is limited by the number of places out-of-state schools will reserve for Montana students, and this may be the beginning of a trend toward requiring the full cost of instruction for WICHE students. However, this program is unique and extremely important to the state, and this Group therefore strongly recommends that Montana continue its support of the WICHE Student Exchange Program and increase its level of support as required.

## The WAMI Program*

One of the problems which constantly besets this rural state is that of educating physicians and placing them into rural communities. There are an adequate number of physicians in the major centers of the state and many of these are specialists practicing where their specialties can be supported by the public patient load. It would be patently absurd to suggest that every small community have a neurosurgeon, an orthopedic surgeon or other such types of specialists. What this state needs, in common with all other rural states, is a larger number of primary care physicians practicing in the smaller communities. One approach to the solution of this problem is the WAMI concept of medical education as developed by the University of Washington School of Medicine. This approach to the education of physicians by allowing a portion of their education and

*The WAMI Program (an acronym for the four participating states, Washington/Alaska/Montana/Idaho) permits states without medical schools to avoid prohibitive construction costs by using already existing facilities (in our state, Montana State University) and by utilizing community physicians as medical faculty for varying periods of time. Students are permitted to take the first portions of their medical training at Montana State University, and then transfer to the University of Washington School of Medicine for the balance of their basic curriculum. At the conclusion of their first two years, the students receive part of their training at University of Washington and part in "community clinical units" with participating local physicians in the communities where the physicians live and practice. These units have been established to provide non-metropolitan educational experiences in primary care practice.

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training to be obtained in-state, on-campus, at Montana State University as well as in the community clinical units (Missoula, Great Falls and Billings at this time) has the potential of attracting these physicians to return to the state, hopefully to the smaller communities, since much of their training is directed toward primary care, i.e., family medicine (G.P.), internal medicine, pediatrics, obstetrics-gynecology. It also is leading to a guaranteed entry of up to 20 qualified Montanans per year into the University of Washington School of Medicine, with a total of up to 80 qualified students within the next four-year period. This alone is of sufficient importance to lead this Group to encourage the continuation of the WAMI program. Adding this aspect of the program to the enhancement of attracting more physicians into rural areas makes it highly desirable that Montana give strong financial support to the program. The Group, therefore, recommends and urges that support be given to this program and that the Legislature appropriate the necessary amount of dollars each year to keep the WAMI program viable in this state. However, this Group also feels that financial support of the WAMI program should be contingent upon a written guarantee from the University of Washington School of Medicine that the full number of up to 80 qualified medical students will actually be admitted within the next four years. The WAMI program should also endeavor to make a systematic effort to introduce Montana's medical students to rural areas during the community clinical phase of their education, rather than concentrating them in the urban areas of the state.

It should also be emphasized that securing medical education, generally, for Montana students will, over the next four years, require a substantial increase in the amount of money which is presently being spent on this effort. With this in mind, the Group urges that a method be developed for determining the appropriate number of medical students which should be subsidized by the state. One method of arriving at an appropriate number of medical students to be subsidized has been suggested to this Group and is contained in Appendix C. (See also Appendix D for additional information.)

Dentistry

The situation with dental students is much the same as with

medical students. There is great need to find some device for protecting existing slots in dental schools for Montana students, and if possible, finding some way to expand the opportunities, since it is expected that securing admission to dental schools, as with other professional schools, will be increasingly difficult for Montana students.

## Veterinary Medicine

Montana students who wish to study veterinary medicine attend the veterinary schools at either Colorado State University or Washington State University. Both of these schools are now under pressure to reduce the number of out-of-state students, and this will result in an immediate drop in the number of Montanans who can enter the veterinary profession. Montana State University has recently initiated conversations with both of these veterinary schools with a view toward developing a WAMI-like program which would include providing some part of the veterinary education program and also some clinical experience in Montana. The Group urges that these efforts continue and that the Legislature give sympathetic consideration to funding such a program when it is developed.

## Pre-Medicine/Pre-Dentistry/Pre-Veterinary Medicine

Since the several units of the post-secondary education system include these pre-professional courses of study, all leading to a bachelor's degree, it would seem at first analysis that there is unnecessary duplication throughout the system. But closer examination shows that these pre-professional courses are not an individual isolated "college", but rather are part of a general amalgam of studies. In simpler language, they are not distinct, separate curricula; they also include all types of scientific studies such as biochemistry, microbiology, chemistry, etc. Therefore, it is this Group's conclusion that these courses of study do have an appropriate place in the system and should remain as they are at the present time. The Group also feels that they are proper for the foreseeable future.

The Group does feel that the counseling system should be carefully scrutinized and the counseling function should be given more attention by the various educational units in order to better screen the potential applicants to these professional schools.

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The students should be given the opportunity to have more exposure to their chosen profession in the field during these pre-professional years. This would lead to a better understanding on the part of the students to their chosen profession and self-selection might well be done on a voluntary basis by the applicant himself, thus lessening the chances of dropping-out after admission to the professional school. The down-to-earth facts of the practice involved, be it medicine, dentistry or veterinary medicine, should be stressed and the romantic aspects displayed in proper context with the workaday world of the professional duties.

Dental Hygiene

At the present time, dental hygienists are being utilized less than they will be in the future. Dental students are being trained to use hygienists for prophylactic work and the future will see a greater need for this professional person. The future also depends on the licensing laws which may be enacted.

The four-year program which now exists should be continued. As this Carroll College program progresses, a need for change may become evident, but it should be undisturbed at this time.

The Group advises against a second baccalaureate program being developed, or any rapid proliferation of the dental hygiene program, particularly in view of the fact that there are currently Montana students enrolled through the WICHE Student Exchange Program in Dental Hygiene.

However, the Group advises examining the value of a two-year program at the vocational-technical center which has responsibility for health care training as its major activity, or at a community college. A two-year program would have a distinct place in the spectrum of dental hygiene education, considering the benefit of allowing an orderly entry from a two- into the four-year program.

Dental Assistant

This Group feels the need in this field is being adequately met and advises against any change. Again, the upward mobility

concept needs to be developed to allow for movement from this level of profession to that of the dental hygienist. Caution is urged, however, that this mobility concept be developed only in accredited schools.

## Medical Technology

The current academic programs in the state are adequate, but there is a need for more clinical internships. Many Montana students must (and do) leave the state after the academic portion of their training to fulfill the one-year internship which is a requirement for registration by their national organization, the American Society of Clinical Pathologists. Feeling that the present academic programs need no alteration, neither expanding nor deleting, the Group recommends that the state develop additional internships for medical technologists which would include identifying the hospitals which have the capabilities, investigating their qualifications, contracting with the hospitals and providing the necessary stipends.

## Medical Laboratory Assistant

Of the four programs which train medical laboratory assistants presently in the state, the one public program (Bozeman Vo-Tech School) will not be in existence after this year. The Group feels that the geographic distribution of the programs is not good, and that there is a need for this type of health personnel. Therefore, the Group feels that these programs should be expanded if other schools or institutions have the necessary financial support and proper laboratory facilities, staff and other resources.

## Environmental Health/Sanitarians

The educational opportunities in this field are adequate and proper at this time and in the foreseeable future and the Group recommends no change except that field experience training should be offered in the state so that these graduates do not find it necessary to leave the state to obtain the necessary field experience for licensure in Montana. One year's experience, either after or during the academic portion of the student's training, is required for licensure in Montana.

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Registered Nurse (RN)

While it has been stated that Montana has one of the highest ratios of licensed nurses to population in the nation, and while it might appear that the state has an over-abundance of educational programs for nurses, there is evidence to indicate the present supply is not meeting the demand in all communities throughout the state. There is need for highly competent nurses on afternoon and night shifts in all hospitals and for all shifts in smaller hospitals. Nurses continue to seek employment in small communities and are especially needed there for aspects of health care delivery which come within the purview of the nurse's expanded role. Withal, there is still some argument that the supply of nurses in Montana is out-stripping the demand.

Graduates of the five programs (three public, two private) in the state which educate nurses to the point at which they may apply for licensure as a registered (or professional) nurse, apparently have little difficulty in obtaining employment if they are flexible regarding hours and location. Also, many nurses complete their education, apply for and are granted licensure, but opt not to either seek or obtain employment. As with most of the other licensed health professions, there is a vast difference between the number of nurses licensed and the number employed. Additionally, factors such as family commitments, career mobility of the nurse, the amount of employment varying from place to place, personnel policies and problems, the decisions involved in urban vs. rural desires of living, and the changes in the health care system, create a constant turn-over in nurses. It is the feeling of this Group, too, that Montana's rural areas will, in the future, rely heavily on the registered nurse for health services, even more than they have in the past. Nurses are assuming a greater role in the delivery of health care, and in fact, are assuming some roles which have traditionally been physician roles in the past.

As the list of Montana's nursing programs indicate, there are presently three distinct levels of basic nursing leading to the RN. The Associate Degree programs are two-year programs, the hospital Diploma program is a three-year program, and the baccalaureate programs are four years in length. There are also two programs in the state for advanced training of nurses: The Master of Nursing and the Family Health Practitioner Program. (See Appendix E for a five-year history of Montana's basic nursing education programs.)

It is the feeling of this Group that all of the different levels of basic nursing education are appropriate. The delivery of good nursing care depends on each one of them. In considering these various levels of education, the upward mobility aspect must be taken into consideration so that the educational programs will make it possible for the individual to progress as she (or he) desires. The Group recognizes that this upward mobility aspect is not necessarily a component of all educational programs, but believes it is vital for nursing. The Group acknowledges that a basic education in nursing, as in all other health fields, is extremely important, but it is equally important that educational opportunities be made available throughout the professional career. The career ladder (upward mobility) concept presently in existence needs to be studied and expanded for all nursing programs.

As has been stated, there is good reason for maintaining the emphasis on the different levels of education and the Group believes those nursing education programs which lead to RN licensure should be continued at their present levels. The programs which are now available are meeting the state's needs and the Group recommends that the varied programs remain as they are now structured. Constant attention should be focused on the changing needs of the state, and with this in mind, modifications can be made as needed in the future by the educational programs themselves.

Adequate clinical teaching facilities are necessary to assist in insuring the health care consumer reliable and competent nursing care. Paradoxically, hospital clinical facilities in the state are, depending upon geographical location and proximity to existing schools of nursing, both over-saturated and underutilized. Overall limitations of clinical facilities requires statewide coordination to assure adequate clinical experiences for nursing students, and would seem to preclude the establishment of new programs or the increase of students in existing nursing programs.

The concept of the "Family Nurse Practitioner" or "Family Health Practitioner" should be fostered, encouraged and supported. This individual is a licensed RN, trained as a "physician extender", to practice under the supervision of a physician and to provide vitally needed health services, especially in rural areas. The Group strongly supports the one such Family Nurse Practitioner program in Montana. However, at this time, proliferation of

these post-RN programs does not seem necessary nor feasible. Modifications in the future should be made as the need arises.

At the present time, the established masters program in nursing appears to be meeting student demands, and there does not seem to be need for additional masters programs.

A major need in nursing education in Montana is for an education consultant for the State Poard of Nursing. This would provide better educational programs and avoid the proliferation of programs and over-utilization of clinical facilities and better use of other facilities. Such a consultant would provide the educational services, which are implied in the Nurse Practice Act, to the consumer and to the schools of nursing in the state.

Practical Nursing

Of the eight practical nursing programs in the state, the program at the Bozeman Vo-Tech School will not be in existence after this year. Programs to train practical nurses are very much controlled by supply and demand. If an area feels a need for a program, the vo-tech centers or the MDTA (Manpower Development and Training Act) program respond. The Group feels that the remaining seven programs are not distributed geographically as beneficially as they might be, but recognizes the supply and demand concept, as well as the scarcity of clinical facilities, as being responsible for this distribution. Despite this, it is the feeling of the Group that the existing programs adequately serve the state at the present time. There may perhaps be an increased or decreased need in the future, and thus the Group urges the Vocational Education Division of the Office of the Superintendent of Public Instruction and the State Board of Nursing, to jointly coordinate the number of programs and students in the future, based on area needs. Additionally, the Group feels that the MDTA practical nursing programs should not be developed unless, or until, they are coordinated with the Vocational Education Division of the Office of the Superintendent of Public Instruction. Also the aspect of upward mobility for the practical nurse graduate into the professional nursing program should be of vital concern. Again, an Education Consultant with the State Board of Nursing would prove valuable in situations such as these.

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## Nurse Aide

The situation with nurse aide training programs is very similar to that stated above concerning practical nurses. These programs are very often the student's entry point into nursing and provide the additional service of eliminating those students who do not have an aptitude for nursing. The Group recommends no change in these programs. However, for the establishment of future programs, the Vocational Education Division of Office of Superintendent of Public Instruction is urged to take the factors of supply, demand and geography into consideration.

## Physical Therapy and Pre-Physical Therapy

The pre-physical therapy programs in the State of Montana adequately fulfill the academic needs of students who wish to become physical therapists. Once these students have completed their pre-requirements, however, it is most difficult for them to gain admission to an accredited school of physical therapy. There are no such schools in the state, and thus Montana students must seek their professional education in other states.

Although in-migrant physical therapists from other states seem to presently meet Montana's needs, it is not inconceivable that at some point in the future, the state will have a need for more physical therapists than are now available.

This is one area in which the WICHE Student Exchange Program has the capabilities to fulfill the needs of Montana. Montana WICHE students are, to a limited degree, presently enrolled in physical therapy programs in other states. Since Montana does not have the ability to fully educate physical therapists presently and since more and more physicians are utilizing the services of physical therapists, the Group recommends increased legislative support to the WICHE Student Exchange Program in Physical Therapy.

Additionally, it has been demonstrated that Associate Degree physical therapists are both adequately trained and are employable in Montana (though not qualified for licensure). Since it is within the capabilities of the Montana university system to train Associate Degree physical therapists, the

Group recommends that consideration be given to establishing a two-year program to train physical therapists at the most appropriate location where clinical facilities are adequate and instructional personnel are available.

## Physical Therapy Aide

This health occupation is needed and utilized in Montana. This Group recommends that programs to train physical therapy aides be established at the vocational level.

## Hospital Administration

There are no programs in Montana offering a professional degree in hospital administration. However, unlike nursing home administrators, there is presently no licensure law for hospital administrators in the state, and thus a professional degree is not a requirement for licensure. Some of the present hospital administrators in the state hold degrees in Business Administration or Accounting, but many also have gone out-of-state to obtain further training and/or professional degrees. At this time, there is no need for such a degree program. However, as federal regulations become more stringent and more complicated for health care facilities, it becomes obvious that the establishment of continuing education programs for hospital administrators (as in all other health fields) should be given a very high priority. (Also see "Nursing Home Administration".)

## Medical Records

There is one degree program in Medical Records in Montana, which, at this time, seems to adequately fulfill the needs of the state. This is a somewhat limited field for employment in Montana because so many of the smaller hospitals cannot afford to hire such a highly trained professional. For this reason, this field will probably eventually become a consulting-type position in most cases, and in fact current Medicaid/Medicare regulations require a consulting Medical Records Administrator in health care facilities. A Medical Records Technician, who works with the Administrator, can be adequately trained at the

vocational level, but there are, at the present time, no such training programs in Montana.

## Physician's Assistant

Although a few of these new allied health workers are presently employed in Montana, there is some question about their legal status. As a result of recent unsuccessful legislation in Montana, the Montana Medical Association and the Montana Nurses Association will, within the near future, undertake a joint study of the entire physician's assistant concept. The MEDEX (Physician's Assistant) Program associated with the University of Washington Medical School has stated that it would cost a minimum of $250,000 to establish a training program for the physician's assistant in Montana. Also, there are some who feel that this type of program is most appropriately established in connection with a medical school. However, it has been predicted that national health insurance regulations will probably permit the utilization of physicians' assistants.

Because of the questionable legal status, the study by the Montana Medical Association and the Montana Nurses Association, and the cost, it is felt that it is not appropriate that this Group recommend the establishment of a training program in Montana at this time.

## Pharmacy

The educational opportunities for pharmacy students at the University of Montana are adequate and no major change is recommended. As the need for a greater number of graduates appears, it seems to this Group that the present facilities can be expanded to meet the need without developing a new college. However, the need is appearing for use of a clinical pharmacist. The Group urges the present School of Pharmacy to consider the development of its curriculum to include this concept.

## Speech Pathology and Audiology

The facilities and program in speech pathology and audiology

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as offered by the University of Montana are adequate for this time and for the foreseeable future. It appears that the needs in this field are being met by the graduates and that there is a trend for trained and educated speech pathologists and audiologists to come to Montana from other states. If the need for an expanded program appears in the future, it can be met by the existing program without duplication elsewhere in the university system. Therefore, the Group recommends no change.

The two real needs, as the Group sees them, are for a method to be developed whereby the services of these professionals are obtainable in the smaller communities around the state, in addition to the major metropolitan centers, as they exist at this time. Again this is a problem of maldistribution. The second need is that of continuing education possibilities being developed outside of the Missoula area.

Radiologic (X-Ray) Technology

The five private hospital programs in the state which train x-ray technologists in two-year programs, seem to adequately supply the state at the present time. There is some evidence that there are presently more applicants than there are positions in x-ray technology. Due to changing technology and the increasingly sophisticated equipment with which the x-ray technologist must cope, the training for this health professional may eventually evolve into an academic degree program. However, for the present, this Group sees no need to establish an academic program for the training of x-ray technologists, or to recommend any other changes.

Respiratory/Inhalation Therapy

The training of respiratory therapists requires too sophisticated a program to establish at this time in Montana. However, technicians in these areas have been trained at the vocational level in Montana, and the Group recommends that these programs be continued and expanded as the need arises, since by 1975, inhalation therapy technicians will be required by the Association of Registered Inhalation Therapists to be graduates of a one-year formal program.

## Occupational Therapy

There is a growing need for occupational therapists nationwide, and Montana is no exception. It is still somewhat a limited field for employment, but there are some openings at present in Montana. The increasing need for occupational therapists is occasioned partially by requirements in federal regulations (Medicare/Medicaid) and by the increased use of occupational therapists by nursing homes, mental institutions, and other long-term care facilities. The program for training occupational therapists consists of a four-year academic program plus a one-year internship. Neither the academic nor the clinical program exists in Montana, but, as with the education and training of many other health professionals, securing a clinical internship is the most difficult problem. However, the clinical facilities for internships, even in other states, are scarce. It has been estimated that it would cost from $50,000 - $60,000 to equip a facility in Montana to the point at which it could offer clinical training to occupational therapists. For this reason, the Group recommends increased support for the WICHE Student Exchange Program in Occupational Therapy.

## Nursing Home Administration

Although there are presently no formal degree programs in Montana for nursing home administrators, Montana State University is developing a two-year program which will issue a "Certificate of Completion", rather than a degree. This program will probably eventually evolve into a baccalaureate degree program, since by 1980 all nursing home administrators will be required by proposed federal regulations to possess a baccalaureate degree. Additionally, the State of Montana requires licensure of nursing home administrators, and it is not unlikely that more stringent educational qualifications might be required for licensure at some point in the future. This Group recommends that the Montana State University program for nursing home administrators be encouraged and supported. The Group also encourages the Montana university system to investigate the feasibility of establishing a similar program for hospital administrators.

Mental Health/Clinical Psychologist

Nationwide the demand for clinical psychologists is currently considerably greater than the supply and it is predicted that this situation will probably exist until 1984. Although the current supply of clinical psychologists in Montana is meeting the needs of the state at the present time, there will no doubt be a greater demand for this health professional in the future - again, primarily because of federal regulations calling for increased numbers and more highly trained health professionals. Therefore, any expansion of the one existing program within the Montana university system seems justified.

Mental Health/Psychiatric Social Worker

There are no programs to train psychiatric social workers in Montana, but it appears that the in-migration of these health professionals from other states is meeting Montana's needs.

Dietitian

There are two programs within Montana's university system which lead to degrees in Nutrition and Home Economics. When a graduate has completed one or the other of these degree programs, he or she may then complete the one-year clinical internship required for certification as a Dietitian. There is no current need to expand the academic programs in Montana, but as has been stated many times before, there is a great need to secure internships for Montana students who have completed their academic training. Again, federal regulations will be requiring more and more of these health professionals as a condition of participation in federal programs.

Osteopathy

There are no schools of osteopathy in the state. Any student wishing to apply for admission to a school of osteopathy can fulfill his pre-professional requirements in

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one of Montana's pre-medical programs. Due to the shortage of osteopaths in Montana, the American Osteopathy Association has set up a cooperative arrangement with two out-of-state colleges of osteopathy to give preferential consideration to Montana applicants, which will perhaps prove beneficial in supplying the state in the future. No change is recommended by the Group.

Optometry

Although there are no schools of optometry in Montana, the pre-professional program situation for Montana students is essentially the same as for osteopaths. Additionally, the WICHE Student Exchange Program in Optometry presently has 21 students from Montana enrolled through its program. With some of these students returning to the state, along with in-migrants from other states, Montana's needs seem to be adequately met at the present time. Continued support of the WICHE Student Exchange Program is recommended.

Chiropractic

There are no schools of chiropractic in Montana, but students here have little difficulty in gaining access to out-of-state schools. Except for geographic distribution, which is a problem with all health care personnel in Montana, the state's needs seem to be adequately met at the present time. No change is recommended.

Podiatry

The pre-professional curriculum of podiatrists is the same as that of pre-medicine, pre-dentistry and pre-veterinary medicine. In order to gain admission to a school of podiatry, the student must have completed at least two years of the pre-professional education, but a bachelors degree is preferred for admission. This Group sees no need to expand the academic programs which currently exist in Montana. There is a WICHE Student Exchange Program in Podiatry, which at the present time, has no Montana students enrolled. Continued support of the WICHE Student Exchange Program is recommended.

## CONTINUING EDUCATION

It has become obvious to the members of this Technical Group that there are two major aspects of health care education in Montana - the primary basic education and that of continuing education. It is also recognized by this Group that its primary mission relates to basic education and that a separate Technical Group has a responsibility to the overall field of continuing education. No doubt this aspect of health care education is being considered by it, but the members of this Group feel it too important not to be addressed as part of its function.

Two observations make it increasingly necessary to stress the importance of continuing education for all health fields: one, the rapid increase in technology and almost explosive development of new techniques and modalities require constant studying to keep abreast of these new changes; two, many health professional organizations require proof of continuing education for relicensure or continuation of membership and others are requiring this to an increasing degree. Reference to the main body of this report shows the ever-recurring theme that, even though the basic education needs are being met, continuing education is an absolute necessity and opportunity for it is generally lacking in this state.

One additional need in the field of continuing education is that of coordination of all the health fields in their educational endeavors. Since there are at least 24 different health care education areas involving a variety of fields, but since they are interrelated in the proper care of the patient, this coordination is mandatory. Coordination of continuing education in the field of health is an absolute necessity. Without it, duplication of education efforts (a costly and wasteful situation), possible omission of important aspects and many other errors of commission and omission may well result.

Several sources of continuing education expertise exist

including the Cooperative Extension Service, the various colleges and universities and post-secondary vocational-technical centers, and allied health and professional associations. That portion of continuing education which relates to higher education should be coordinated within the institutions involved and remains a function of the basic education institution.

In addition to the above mentioned sources, this Group wishes to direct the attention of the Commission to one other already existing, capable continuing education organization in the state. This is the Montana Medical Education and Research Foundation (MMERF). (See Appendix F). It is a non-profit corporate body developed in 1969 with the expressed purpose of providing continuing education for all health professionals in Montana.

It is the recommendation of this Group, therefore, that all potential sources for continuing education be investigated - MMERF, the university system, the vocational-technical centers, and the allied health and professional associations - and that a coordinating system be designated to accommodate continuing education in the total health care field.

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## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

The WICHE Program:

"...recommends that Montana continue its support of the WICHE Student Exchange Program and increase its level of support as required."

The WAMI Program:

"...recommends and urges that support be given to this program and that the Legislature appropriate the necessary amount of dollars each year to keep the WAMI program viable in this state. However, this Group also feels that financial support of the WAMI program should be contingent upon a written guarantee from the University of Washington School of Medicine that the full number of up to 80 qualified medical students will actually be admitted within the next four years. The WAMI program should also endeavor to make a systematic effort to introduce Montana's medical students to rural areas during the community clinical phase of their education, rather than concentrating them in the urban areas of the state."

Medicine:

"...urges that a method be developed for determining the appropriate number of medical students which should be subsidized by the state."

Dentistry:

"There is a great need to find some device for protecting existing slots in dental schools for Montana students, and ... finding some way to expand the opportunities (for) admission to dental schools..."

## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Veterinary Medicine:

"...urges that (Montana State University's efforts to develop a WAMI-like program for veterinary medicine) continue and that the Legislature give sympathetic consideration to funding such a program..."

Pre-Medicine/Pre-Dentistry/Pre-Veterinary Medicine:

"...these courses...should remain as they are at the present time."

"...the counseling system should be carefully scrutinized and the counseling function should be given more attention....in order to better screen the potential applicants to these professional schools. The students should be given the opportunity to have more exposure to their chosen profession in the field during these pre-professional years."

Dental Hygiene:

"The four-year program which now exists should be continued..."

"The Group advises against a second baccalaureate program being developed..."

"...advises examining the value of a two-year program at the vocational-technical center which has responsibility for health care training as its major activity, or at a community college."

Dental Assistant:

"...the needs...are being adequately met and advises against any change."

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## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Dental Assistant: (continued)

"...the upward mobility concept needs to be developed..."

"...this mobility concept (should) be developed only in accredited schools."

Medical Technology:

"...the Group recommends that the state develop additional internships for medical technologists..."

Medical Laboratory Assistant:

"...the Group feels that these programs should be expanded if other schools or institutions have the necessary financial support and proper laboratory facilities, staff and other resources."

Environmental Health/Sanitarians:

"...the Group recommends no change (in the academic programs, but) field experience training should be offered in the state..."

Registered Nurse:

"...the Group believes those nursing education programs which lead to RN licensure should be continued at their present levels."

"...recommends that the varied programs remain as they are now structured...(but based on the changing needs of the state) modifications can be made as needed in the future..."

## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Registered Nurse: (continued)

"Overall limitations of clinical facilities requires statewide coordination to assure adequate clinical experiences for nursing students..."

"The Group strongly supports the ... Family Nurse Practitioner program ... However, proliferation of these post-RN programs does not seem necessary nor feasible. Modifications in the future should be made as the need arises."

"...there does not seem to be need for additional masters programs."

"A major need in nursing education ... is for an education consultant for the State Board of Nursing."

Practical Nursing:

"...the existing programs adequately serve the state at the present time."

"...the Group urges the Vocational Education Division of the Office of the Superintendent of Public Instruction and the State Board of Nursing to jointly coordinate the number of programs and students in the future based on area needs."

"...the MDTA practical nursing programs should not be developed unless or until they are coordinated with the Vocational Education Division of the Office of the Superintendent of Public Instruction."

Nurse Aide:

"...recommends no change in these programs, however, for the establishment of future programs, the Vocational Education Division of the Office of Superintendent of Public Instruction is urged to take the

## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Nurse Aide: (continued)

factors of supply, demand and geography into consideration."

Physical Therapy and Pre-Physical Therapy:

"...recommends increased legislative support to the WICHE Student Exchange Program in Physical Therapy."

"...recommends that consideration be given to establishing a two-year program to train physical therapists at the most appropriate location where clinical facilities are adequate and instructional personnel are available."

Physical Therapy Aide:

"...recommends that programs to train physical therapy aides be established at the vocational level."

Hospital Administration:

"...the establishment of continuing education programs for hospital administrators ... should be given a very high priority."

"...encourages the Montana university system to investigate the feasibility of establishing a ... program (similar to that for nursing home administrators) for hospital administrators."

Medical Records:

"...(the) one degree program (in the state) seems to adequately fulfill the needs of the state."

## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Physician's Assistant:

"...(for a variety of reasons) it is felt that it is not appropriate that this Group recommend the establishment of a training program in Montana at this time."

Pharmacy:

"The educational opportunities for pharmacy students... are adequate and no major change is recommended."

"The Group urges the present School of Pharmacy to consider the development of its curriculum to include (the clinical pharmacist) concept."

Speech Pathology and Audiology:

"If the need for an expanded program appears in the future, it can be met by the existing program...."

"...a method (should) be developed whereby the services of these professionals are obtainable in the smaller communities around the state..."

"...(another) need is that of continuing education possibilities being developed outside of the Missoula area."

Radiologic (X-Ray) Technology:

"The ... private hospital programs ... seem to adequately supply the state at the present time."

"...this Group sees no need to establish an academic program ... or to recommend any other changes."

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## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Respiratory/Inhalation Therapy:

"...the Group recommends that these programs be continued and expanded as the need arises..."

Occupational Therapy:

"...the Group recommends increased support for the WICHE Student Exchange Program in Occupational Therapy."

Nursing Home Administration:

"This Group recommends that the (proposed) Montana State University program for nursing home administrators be encouraged and supported."

Mental Health/Clinical Psychologist:

"...any expansion of the one existing program within the ... university system seems justified."

Mental Health/Psychiatric Social Worker:

"...the in-migration of these health professionals ... is meeting Montana's needs."

Dietitian:

"...there is a great need to secure internships for Montana students who have completed their academic training."

## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Osteopathy:

"...(the present) cooperative arrangement with two out-of-state colleges of osteopathy ... will perhaps prove beneficial in supplying the state in the future. No change is recommended by the Group."

Optometry:

"Continued support of the WICHE Student Exchange Program is recommended."

Chiropractic:

"...the state's needs seem to be adequately met (except for maldistribution)..."

"No change is recommended."

Podiatry:

"This Group sees no need to expand the academic programs which currently exist..."

"Continued support of the WICHE Student Exchange Program is recommended."

Continuing Education:

"It is the recommendation of this Group ... that all potential sources for continuing education be investigated - MMERF, the university system, the vocational-technical centers, and the allied health and professional associations - and that a coordinating system be designated to accommodate continuing education in the total health care field."

## SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

General Recommendations:

1. More emphasis should be placed on preventive care in health education programs.

2. Health education for consumers - particularly during the school years - is a concept which should be given a high priority.

3. Student needs, as well as community needs, should also be considered in planning for educational programs.

4. Sound vocational counseling and guidance should be strongly encouraged beginning at the junior and senior high school level and continuing through the post-secondary level. This is necessary to assist students to meet their educational needs and interests in the health fields of their choice where employment is available.

5. All health care education programs should be permitted to control admissions as they see fit based on program capacity and reliable projected needs.

6. All health care personnel should have available to them, and be encouraged to participate in, adequate continuing education and in-service training programs.

7. There is a great need within the state for the most reliable system possible for projecting future needs in the health occupations and professions.

# HEALTH CARE EDUCATION PROGRAMS IN MONTANA

| PROGRAM | ENROLLMENT | SIZE OF LAST GRADUATING CLASS | LENGTH OF PROGRAM* |
|---|---|---|---|
| **MEDICINE** | | | |
| WAMI Program | 10 | (First year) | 4 years |
| WICHE Student Exchange Program | 60 | | |
| **PRE-MEDICINE** | | | |
| Carroll College | 109 | 9 | 4 years |
| College of Great Falls | 5 | | 4 years |
| Rocky Mountain College | 3(past 3 yrs) | | 4 years |
| University of Montana | 123 | | 4 years |
| Eastern Montana College | 12 | 3 | 4 years |
| Montana State University | 178 | 12 | 4 years |
| **DENTISTRY** | | | |
| WICHE Student Exchange Program | 18 | | |
| **PRE-DENTAL** | | | |
| Carroll College | 15 | 3 | 4 years |
| College of Great Falls | 4 | | 4 years |
| Rocky Mountain College | 3(past 3 yrs) | | 4 years |
| University of Montana | 19 | | 4 years |
| Eastern Montana College | 3 | 1 | 4 years |
| Montana State University | (Incl. in pre-med) | | 4 years |
| **DENTAL HYGIENE** | | | |
| Carroll College | 19 | (First year) | 3-4 years |
| WICHE Student Exchange Program | 12 | | |
| **DENTAL ASSISTANTS** | | | |
| Butte Business College | 21 | | 9 months |
| Great Falls Vo-Tech Center | 36 | 26 | 12 months |

*"Year" means "academic year"

| PROGRAM | ENROLLMENT | SIZE OF LAST GRADUATING CLASS | LENGTH OF PROGRAM |
|---|---|---|---|
| **MEDICAL TECHNOLOGY** | | | |
| Carroll College (Degree Program) | 24 | 5 | 4 years |
| University of Montana (Degree Pgm) | 70 | 10 | 4 years |
| Montana State University (Degree Pgm) | 200 | 18 | 4 years |
| Deaconess Hospital,G.F.(Internshp) | 6 | 6 | 12 months |
| Columbus Hospital,G.F.(Internship) | 4 | 2 | 12 months |
| St.James Comm.Hosp.,Butte(Intnshp) | 6 | 6 | 12 months |
| **MEDICAL LABORATORY ASSISTANT** | | | |
| Deaconess Hospital, Bozeman | 8 | 6 | 12 months |
| Northern Montana Hospital, Havre | 2 | 2 | 13 weeks |
| St. Peter's Hospital, Helena | 2 | 1 | 6 months |
| Bozeman Vo-Tech School(Med.Lab.Aide) | 6 | 6 | 12 months |
| **ENVIRONMENTAL HEALTH (SANITARIANS)** | | | |
| Montana State University | 40 | 15 | 4-6 years |
| **NURSING** | | | |
| Carroll College (Baccalaureate) | 61 | (First year) | 4 years |
| Montana State University: | | | |
| Baccalaureate Degree | 841 | 123 | 4 years |
| Family Health Practitioner Program | 10 | 10 | 1 year |
| Master of Nursing Program | 18 | 9 | 2 years |
| St.Patrick School of Nursing,Miss(Diploma) | 140 | 12 | 30 months |
| Miles Community College (Associate) | 73 | 18 | 2 yrs.+summer session |
| Northern Montana College (Associate) | 55 | 39 | 2 yrs.+summer session |
| **PRACTICAL NURSING*** | | | |
| Billings Vo-Tech Center | 31 | 23 | 12 months |
| Bozeman Vo-Tech School | 35 | 21 | 12 months |
| Butte Vo-Tech Center | 35 | 34 | 12 months |
| Great Falls Vo-Tech Center | 36 | 17 | 15 months |
| Helena Vo-Tech Center | 21 | 21 | 12 months |
| Missoula Technical Center | 48 | 35 | 12 months |
| Northern Montana College | 20 | 21 | 11 months |
| Warm Springs State Hospital | 25 | 18 | 12 months |
| **NURSE AIDE*** | | | |
| Bozeman Vo-Tech School | 25 | | 12 weeks |
| Billings Vo-Tech Center | 12 | 33 | 12 weeks |
| Butte Vo-Tech Center | 0 | 22 | 12 weeks |
| Great Falls Vo-Tech Center | 12 | 40 | 2 months |

*Graduating class size figures shown for the vo-tech centers for practical nurses and nurse aides are for the period 7-1-72 to 6-1-73.

| PROGRAM | ENROLLMENT | SIZE OF LAST GRADUATING CLASS | LENGTH OF PROGRAM |
|---|---|---|---|
| PHYSICAL THERAPY | | | |
| WICHE Student Exchange Program | 2 | | |
| PRE-PHYSICAL THERAPY | | | |
| Carroll College | 2 | 0 | 3-4 years |
| University of Montana | 101 | 27 | 3-4 years |
| Montana State University | 40 | 5 | 3-4 years |
| PHYSICAL THERAPY AIDE | | | |
| Bozeman Vo-Tech School | 15 | 12 | 10 months |
| HOSPITAL ADMINISTRATION | | | |
| No Programs in Montana | | | |
| MEDICAL RECORDS | | | |
| Carroll College | 37 | 11 | 4 years |
| PHYSICIAN'S ASSISTANT | | | |
| No Programs in Montana | | | |
| PHARMACY | | | |
| University of Montana | 120 | 25 | 5 years |
| SPEECH PATHOLOGY/AUDIOLOGY | | | |
| University of Montana | 110 | 13 | 4-6 years |
| RADIOLOGIC (X-RAY) TECHNOLOGY: | | | |
| Deaconess Hospital, Great Falls | 6 | 4 | 24 months |
| Deaconess Hospital, Billings | 16 | 5 | 30 months |
| St. Patrick's Hospital, Missoula | 5 | 4 | 24 months |
| St. Vincent's Hospital, Billings | 12 | 6 | 24 months |
| Columbus Hospital, Great Falls | 12 | 6 | 24 months |
| RESPIRATORY/INHALATION THERAPY | | | |
| No basic education programs for therapists in Montana, but an adult education program for technicians has been offered at the vocational-technical level. | | | |
| VETERINARY MEDICINE | | | |
| WICHE Student Exchange Program | 47 | | |

| PROGRAM | ENROLLMENT | SIZE OF LAST GRADUATING CLASS | LENGTH OF PROGRAM |
|---|---|---|---|
| **PRE-VETERINARY MEDICINE** | | | |
| Carroll College | 10 | 2 | 4 years |
| University of Montana | 27 | | 4 years |
| Eastern Montana College | 5 | 3 | 4 years |
| Montana State University | 119 | | 3 years |
| **OCCUPATIONAL THERAPY** | | | |
| WICHE Student Exchange Program | 2 | | |
| **OPTOMETRY** | | | |
| WICHE Student Exchange Program | 21 | | |
| **PRE-OPTOMETRY** | | | |
| University of Montana | 10 | | 3-4 years |
| Carroll College | 8 | 1 | 3-4 years |
| Montana State University | (Incl. in pre-med) | | 3-4 years |
| **PODIATRY** | | | |
| WICHE Student Exchange Program | None | | |
| **NURSING HOME ADMINISTRATION** | | | |
| No Programs in Montana | | | |
| **MENTAL HEALTH** | | | |
| CLINICAL PSYCHOLOGIST | | | |
| University of Montana | 36 | 8 | Undergrad.+ Ph.D. |
| PSYCHIATRIC SOCIAL WORKER | | | |
| No Programs in Montana | | | |
| **DIETITIAN** | | | |
| University of Montana | 25 | 4 | 4 years + internship |
| Montana State University | 40 | 13 | 4 years + internship |
| **OSTEOPATHY** | | | |
| No Programs in Montana | | | |
| **CHIROPRACTIC** | | | |
| No Programs in Montana | | | |

## THE WICHE STUDENT EXCHANGE PROGRAM

| PROGRAM | NUMBER OF MONTANA STUDENTS PRESENTLY ENROLLED | AMOUNT OF SUPPORT FEE (PER ANNUM) |
|---|---|---|
| Medicine | 60 | $5,000 |
| Dentistry | 18 | 4,000 |
| Veterinary Medicine | 47 | 4,000 |
| Dental Hygiene | 12 | 1,800 |
| Physical Therapy | 2 | 2,500 + clinical fees |
| Occupational Therapy | 2 | 2,500 + clinical fees |
| Optometry | 21 | 2,500 |
| Podiatry | 0 | 2,500 |

## ONE METHOD OF DETERMINING THE APPROPRIATE NUMBER OF MEDICAL STUDENTS

| University | Total Resident Students | Average Resident Students Per Year | Total State Population | State Pop. ÷ Aver No. Of Resident Student |
|---|---|---|---|---|
| Colorado (1967-1972) | 385 | 77 | 2,200,000 | 28,500 |
| Oregon (1967-1972) | 373 | 75 | 2,100,000 | 28,000 |
| Utah (1967-1972) | 271 | 54 | 1,060,000 | 19,600 |
| Washington (1968-1972) | 310 | 78 | 3,400,000 | 43,600 |

Estimates of Resident Students supported by Montana Population:

A. Estimate #1:

| | |
|---|---|
| Colorado | 28,500 |
| Oregon | 28,000 |
| Utah | 19,600 |
| Washington | 43,600 |
| | 119,700 ÷ 4 = 1 resident student per 30,000 |

Montana estimate = Montana Pop ÷ Aver. for four states = 700,000 ÷ 30,000 = 23 resident students

B. Estimate #2: (excluding Washington)

| | |
|---|---|
| Colorado | 28,500 |
| Oregon | 28,000 |
| Utah | 19,600 |
| | 76,100 ÷ 3 = 1 resident student per 25,400 |

Montana estimate: 700,000 ÷ 25,400 = 28 resident students supported

## WICHE MEDICAL STUDENTS FROM OTHER STATES

Listed below you will find the totals for the number of students supported by states participating in the WICHE Student Exchange Program in medicine:

| | |
|---|---|
| Alaska (pop. 302,173*) | 19 medical students |
| Arizona**(pop. 1,772,482) | 20 medical students |
| Hawaii**(pop. 769,913) | 14 medical students |
| Idaho (pop. 713,008) | 74 medical students |
| Nevada***(pop. 488,738) | 27 medical students |
| Wyoming (pop. 332,416) | 44 medical students |
| Montana (pop. 694,409) | 60 medical students |

Reference: Supplement to the WICHE Student Exchange Programs Manual, 1973

*Populations are from the 1970 Census

**These states have their own medical school, in addition to supporting their own WICHE medical students

***Nevada has its own first and second years of medical school

| | Northern Montana (Associate) College | | Miles Community (Associate) College | | Carroll (Baccalaureate) College | Montana State University (Baccalaureate) | | St. Patrick's Hospital (Diploma) Missoula | | St. Vincent's* Hospital, (Diploma) Billings | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Enrlmnt/Grads | | Enrlmnt/Grads | | Enrlmnt/Grads | Enrlmnt/Grads | | Enrlmnt/Grads | | Enrlmnt/Grads | | |
| 1969-1970 | 25 | 14 | 29 (1st year) | | | 338 | | | 18 | | | |
| 1970-1971 | 30 | 11 | 44 | 17 | | 435 | 104 | | 20 | 65 | 26 | |
| 1971-1972 | 62 | 24 | 50 | 18 | | 576 | 92 | 97 | 23 | 48 | 21 | |
| 1972-1973 | 57 | 39 | 61 | 18 | | 710 | 123 | 119 | 12 | 26 | 26 | (last class) |
| 1973-1974 | 55 | | 73 | 23 (Est) | 61 (1st year) | 841 | 149** (Est.) | 140 | 33 (Est) | | | |

*St. Vincent's program is no longer operational
**All of the 135 basic nursing students included in this total who desire employment are now employed or have made commitments for positions following graduation June 7, 1974.

Montana Nursing Programs

APPENDIX E

# MONTANA MEDICAL EDUCATION AND RESEARCH FOUNDATION

# MMERF

## HISTORY AND OBJECTIVES

The Montana Medical Education and Research Foundation (MMERF), a non-profit corporation, originated in 1969 under the stimulus of the Montana Medical Association with the support of six other health professional organizations. As of 1973, 21 health groups have become members of MMERF.

The original financial support to MMERF came from a three-year grant from the Mountain States Regional Medical Program. The grant terminated June 1972.

The Foundation's purpose was, and continues to be, "to improve patient care through a coordinated program to provide continuing medical education to all health professionals of Montana."

In this endeavor, MMERF has sought to provide practical, expert, up-to-date, interdisciplinary, and locally directed programs.

## ACTIVITIES—ANSWERING THE NEED

All programming is a joint responsibility of committees or representatives of the various member health organizations and the staff of MMERF. This assures that programs meet the needs of the health professionals as defined by them.

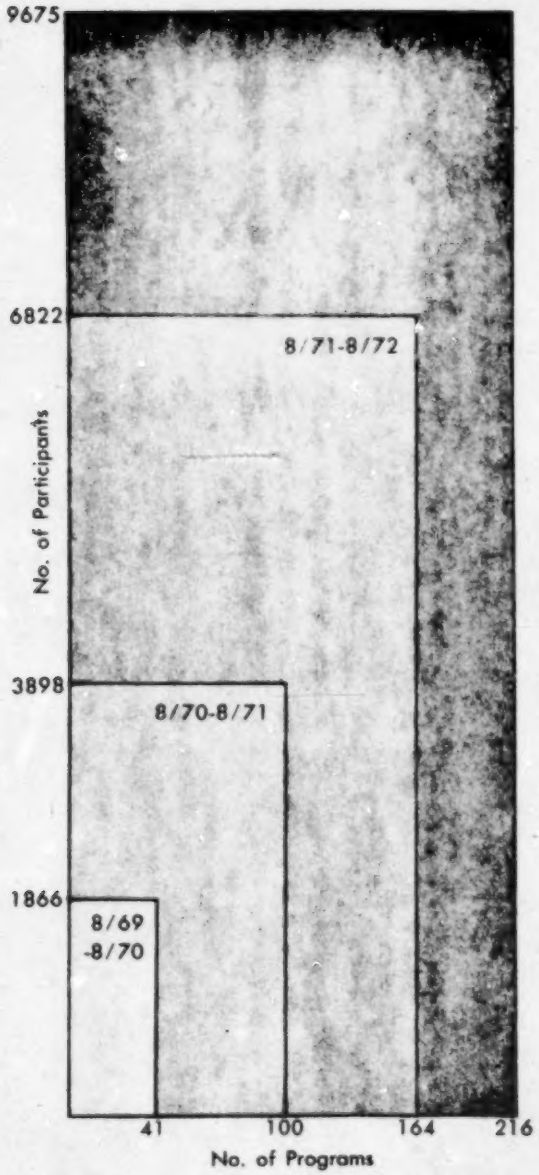
In addition, the staff and participating health professionals work regularly with consultants to insure well-defined needs and educationally sound programming and evaluation.

Although this programming has been its major activity, MMERF continues to be involved in many other areas of Montana's health services and educational resources, especially where cooperative relationships are needed.

During its first four years, the Foundation has sponsored or co-sponsored 216 programs in 22 different locations, reaching nearly 10,000 participants. Samples of past programs are:

Adolescence
Aphasia
Blood Banking
Cancer
Death & Dying
Diabetes
Drug Abuse
Electrical Hazards
Emergency Care
Gynecology
Health Careers
Hematology
Inhalation Therapy
Isolation Techniques
Medical Records
Methods Management
Neonatal Care
Neurology
Nutrition
Ostomy Care
Pediatrics
Radiology
Sports Medicine
Transactional Analysis

# THE FIRST FOUR YEARS OF MMERF CONTINUING EDUCATION




# FOUNDATION MEMBERSHIP

The following professions and voluntary health organizations* are working cooperatively within MMERF:

Dentists
Dental Assistants
Dental Hygienists
Hospital Administrators
Licensed Practical Nurses
Medical Record Administrators
Medical Technologists
Montana Division-American Cancer Society
Montana Heart Association
Montana League for Nursing
Montana Lung Association
Nurse Anesthetists
Nursing Home Administrators
Nutritionists and Dietitians
Optometrists
Pharmacists
Physical Therapists
Physicians
Radiologic Technologists
Registered Nurses
Speech and Hearing Therapists

*—as of October 1973

# THE FUTURE

The demand upon the Foundation's services remains; projections and growth in activities tend to indicate future demands will be even mo e extensive.

For the cooperative, productive effort embodied in MMERF to continue, it must develop a sound financial base. Foundations similar to the Montana Medical Education and Research Foundation in other states have become inactive because of lack of funding. Registration fees, if properly set, can usually pay the costs of an individual program; registration fees alone cannot support all total operational costs.

All possible sources of funding, including outside grants, are under constant examination and subsequent application. However, long-term responsibility for the Foundation's viability must be assumed by professional and voluntary health organizations and health facilities of Montana.

# FUNDING— HOW CAN YOU HELP?

Presently, MMERF program funding is derived from contributions and assessments from health organizations, special program grants, philanthropic foundations, business and industry, memorials, and other individual contributions.

The Foundation is tax exempt and all individual contributions are tax deductible.

Inasmuch as Regional Medical Program funding has ended, the viability of the Montana Medical Education and Research Foundation depends upon contributions and development of present and other potential sources.

Further information regarding MMERF may be obtained from:

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